3

1

2

3

What is claimed is:

1	1. A system for negotiating multi-path connections between a
2	plurality of intermediary devices in a networked computing environment,
3	comprising:
4	a client-side network protocol stack defined on an intermediary device
5	available from a plurality of intermediary devices on a primary communications
6	channel and establishing a client-side connection between a requesting client and
7	the intermediary device in accordance with a connection-oriented network
8	protocol;
9	a server-side network protocol stack establishing a server-side connection
10	between the intermediary device and the requested server on a primary
11	communications channel in accordance with the connection-oriented network
12	protocol;
13	a synchronization module determining differences in connection
14	parameters defined for the client-side connection and the server-side connection
15	and communicating the connection parameter differences to at least one other
16	such intermediary device over an out-of-band communications channel.
1	2. A system according to Claim 1, further comprising:
2	the synchronization module communicating a service request initially
3	received from the requesting client to the at least one other such intermediary
4	device while establishing the client-side connection over the out-of-band
5	communications channel.
1	3. A system according to Claim 1, further comprising:
2	the synchronization module deferring communicating the connection

4. A system according to Claim 1, wherein the out-of-band communications channel comprises at least one of a broadcast, multicast, or point-to-point channel.

0165.01.ap4 - 19 -

parameter differences for transitory connections.

1

5.

2	network protocol comprises the Transmission Control Protocol (TCP).	
1	6. A system according to Claim 1, wherein the intermediary device	
2	comprises at least one of a firewall and a boundary controller.	
1	7. A method for negotiating multi-path connections between a	
2	plurality of intermediary devices in a networked computing environment,	
3	comprising:	
4	establishing a client-side connection between a requesting client and an	
5	intermediary device available from a plurality of intermediary devices on a	
6	primary communications channel in accordance with a connection-oriented	
7	network protocol;	
8	establishing a server-side connection between the intermediary device and	d
9	the requested server on a primary communications channel in accordance with th	e
0	connection-oriented network protocol;	
1	determining differences in connection parameters defined for the client-	
12	side connection and the server-side connection; and	
3	communicating the connection parameter differences to at least one other	
4	such intermediary device over an out-of-band communications channel.	
1	8. A method according to Claim 7, further comprising:	
2	communicating a service request initially received from the requesting	
3	client to the at least one other such intermediary device while establishing the	
4	client-side connection over the out-of-band communications channel.	
1	9. A method according to Claim 7, further comprising:	
2	deferring communicating the connection parameter differences for	
3	transitory connections.	

A system according to Claim 1, wherein the connection-oriented

0165.01.ap4 - 20 -

3

1	10. A method according to Claim 7, wherein the out-of-band
2	communications channel comprises at least one of a broadcast, multicast, or
3	point-to-point channel.
1	11. A method according to Claim 7, wherein the connection-oriented
2	network protocol comprises the Transmission Control Protocol (TCP).
1	12. A computer-readable storage medium holding code for performing
2	the method of Claim 7.
1	13. A system for communicating routing information between a
2	plurality of link layer intermediary devices in a networked computing
3	environment, comprising:
4	a link layer intermediary device available from a plurality of link layer
5	intermediary devices receiving a session packet from a requesting client;
6	an encapsulation module generating an echo request packet identified as
7	originating from the requesting client and addressed to a requested server and
8	encapsulating the session packet within the echo request packet;
9	the link layer intermediary device forwarding the echo request packet to
0	the requested server;
1	at least one other such link layer intermediary device receiving an echo
2	response packet from the requested server;
3	an unencapsulation module unencapsulating session packet from within
4	the echo response packet and retrieving routing information from the session
5	packet; and
6	the least one other such link layer intermediary device forwarding a
7	response packet to the requesting client.
1	14. A system according to Claim 13, wherein the echo request packet
2	is an Internet Control Message Protocol (ICMP) echo request packet and the echo

0165.01.ap4 - 21 -

response packet is an ICMP echo response packet.

2	network protocol comprises the Transmission Control Protocol (TCP).
1	16. A system according to Claim 13, wherein the intermediary device
2	comprises at least one of a firewall and a boundary controller.
1	17. A method for communicating routing information between a
2	plurality of link layer intermediary devices in a networked computing
3	environment, comprising:
4	receiving a session packet from a requesting client on a link layer
5	intermediary device available from a plurality of link layer intermediary devices;
6	generating an echo request packet identified as originating from the
7	requesting client and addressed to a requested server and encapsulating the
8	session packet within the echo request packet;
9	forwarding the echo request packet to the requested server;
10	receiving an echo response packet from the requested server on at least
11	one other such link layer intermediary device;
12	unencapsulating session packet from within the echo response packet and
13	retrieving routing information from the session packet; and
14	forwarding a response packet to the requesting client.
15	18. A method according to Claim 17, wherein the echo request packet
16	is an Internet Control Message Protocol (ICMP) echo request packet and the echo
17	response packet is an ICMP echo response packet.
1	19. A method according to Claim 17, wherein the connection-oriented
2	network protocol comprises the Transmission Control Protocol (TCP).
1	20. A computer-readable storage medium holding code for performing

A system according to Claim 13, wherein the connection-oriented

the method of Claim 17.

15.

1